

UNITED STATES PATENT APPLICATION

FOR

GARMENT HAVING HEAD-AND-FACE

COVER

GARMENT HAVING HEAD-AND-FACE COVERBACKGROUND OF THE INVENTIONField of the Invention

[0001] The present invention relates generally to an article of apparel and more particularly, but not by way of limitation, to a garment having a head-and-face cover and a hood.

Description of the Related Art

[0002] Ski masks have been common items of winter apparel for many years. Ski masks are types of head-and-face covers that resiliently engage the head and face to keep warm the face, ears and head in cold weather conditions. Because ski masks are often worn during times of great activity, such as while snow skiing, and are typically removed after the activity for comfort, it is very common for the ski mask to fall out of a coat or sweatshirt pocket and thus become lost.

[0003] A wearer may also use a head-and-face cover for several other purposes. For example, police and military personnel use head-and-face covers to minimize light reflection from the face of a wearer during night operations. Head-and-face covers may also be used to block heat radiation to protect the skin of a wearer.

[0004] While ski masks help to keep the face, ears and head warm, in very windy or cold environments, it is also desirable to have a garment with a hood over the ski mask to further keep warm the face, head, neck and ears. The hood helps largely by forming an

insulating air layer between the ski mask and hood, thus inhibiting heat convection from the head, face and neck of a skier.

[0005] Thus, there is a need for a garment configured to prevent losing a ski mask when the ski mask is taken off by the wearer and that has a hood to further inhibit heat transfer from the head and face of the wearer.

SUMMARY OF THE INVENTION

[0006] The claimed invention is directed to a garment having a body portion, a hood and a head-and-face cover. The garment body portion substantially covers a torso of a person wearing the garment. The hood and head-and-face cover operate independently from one another so that either one can be worn or not worn irrespective of whether the other one is being worn. The hood is connected to the garment body portion. The head-and-face cover is attached to either the garment body portion or the hood. The garment also includes a storage structure for compact storage of the head-and-face cover when the head-and-face cover is not in use. In some embodiments, the storage structure is a pocket attached to the hood of the garment.

[0007] These and various other features and advantages which characterize the claimed invention will become apparent upon reading the following detailed description and upon reviewing the associated drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] FIG. 1 is a front elevation view of a garment with a hood and a head-and-face cover constructed in accordance with the present invention.

[0009] FIG. 2 is a partial side view of the garment shown in FIG. 1.

[0010] FIG. 3 is a partial side view of the garment shown in FIG. 1.

[0011] FIG. 4 is a partial side view of the garment shown in FIG. 1, with the head-and-face cover in a deployed position.

[0012] FIG. 5 is a rear elevation view of a garment with a head-and-face cover constructed in accordance with the present invention.

[0013] FIG. 6 is a partial side view of the garment shown in FIG. 5.

[0014] FIG. 7 is a partial side view of the garment shown in FIG. 5.

[0015] FIG. 8 is a partial side view of the garment shown in FIG. 5.

[0016] FIG. 9 is a partial detailed view of a pocket for storage of the head-and-face cover shown in FIG. 5.

[0017] FIG. 10 is a partial perspective view of the pocket shown in FIG. 5.

[0018] FIG. 11 is a front elevation view of a garment with a hood and a head-and-face cover constructed in accordance with the present invention.

[0019] FIG. 12 is a partial side view of the garment shown in FIG. 11.

[0020] FIG. 13 is a partial side view of the garment shown in FIG. 11.

[0021] FIG. 14 is a partial side view of the garment shown in FIG. 11.

[0022] FIG. 15 is a partial side view of the garment shown in FIG. 11.

DETAILED DESCRIPTION

[0023] Referring to the drawings in general, and more particularly to FIG. 1, a garment 100 is shown therein to have a body portion 102 and a head-and-face cover 104. In the position shown in FIG. 1, the head-and-face cover 104 would be positioned over the head and face of a person (not shown). It is generally contemplated that the head-and-face cover 104 is a ski mask. However, the head-and-face cover 104 may also be used for any other activity where it desirable to completely cover the head and face.

[0024] A main purpose of the head-and-face cover 104 is to provide a layer of insulation to retain body heat. In particular, the head-and-face cover 104 provides a protective layer on the surface of the skin to impede heat convection from the skin and thereby prevent cooling, drying and damaging of the skin.

[0025] The garment 100 has a collar 106 that, when the garment is worn by a person, surrounds a neck and throat of the person. The head-and-face cover 104 has eye openings 108 that permit the person wearing the head-and-face cover 104 to see. The eye openings 108 are surrounded by a border 110 that reinforces the edges of the head-and-face cover 104 around the eye openings 108. For the embodiment shown in FIG. 1, the border 110 forms a figure-eight pattern around the eye openings 108.

[0026] The garment 100 also has sleeves 112 to keep warm the arms of the person wearing the garment 100. A pocket 114, or other storage structure, is positioned behind the neck of the person wearing the garment 100 when the head-and-face cover 104 is covering the head and face of the person. The pocket 114 is a piece of material attached to a hood 115 along sides and a bottom of the pocket 114. The pocket 114 has an open top to receive the head-and-face cover 104.

[0027] The hood 115 covers the back and top of the head when in an “up” position and dangles loosely behind the back of the person when in a “down” position. When the hood 115 is in an up position and the head-and-face cover 104 is deployed, the hood 115 covers a top and back of the head-and-face cover 104. The hood 115 has a drawstring 117 only partially visible in FIG. 1. The drawstring 117 fits through a passageway (not shown) defined in a front portion of the hood 115 near the face of the person. When the drawstring 117 is pulled tight, the hood 115 more closely hugs the head of the person.

The drawstring ends 120 may be tied beneath the chin of the wearer to secure the hood 115 to the head. The head-and-face cover 104 shown in FIG. 1 has a mouth opening 119 to allow the wearer to better breathe through the mouth.

[0028] The head-and-face cover 104 and the hood 115 may be used independently from one another, so that the wearer may elect to wear just the head-and-face cover 104, just the hood 115, or the head-and-face cover 104 and the hood 115 at the same time. When the head-and-face cover 104 is worn in combination with the hood 115 in the up position, the hood 115 generally fits more loosely around the head than does the head-and-face cover 104. Thus, an insulating layer of air is formed between the hood 115 and the head-and-face cover 104. This combination of a hood 115 with a head-and-face cover 104 further protects the face and head against heat convection so that the face and head retain more heat.

[0029] FIGS. 2-3 illustrate the method used to put the head-and-face cover 104 into the pocket 114 after removing the head-and-face cover 104 from the head of the wearer. As shown in FIG. 2, the head-and-face cover 104 has already been removed from the head of the wearer. The garment body portion 102 has a back portion 116 and a front portion 118. The pocket 114 is attached to the hood 115 near the collar 106. After the head-and-face cover 114 has been removed from the head and face, the head-and-face cover 114 is rolled, crumpled and stuffed into the pocket 114.

[0030] FIG. 4 shows a side view of the head-and-face cover 104 in a deployed position. The hood 115 has a pocket 114 inside the hood 115 near the collar 106. For the embodiment shown in FIG. 4, the mouth opening 119 has a removable mouth cover 121, shown removed from the mouth opening 119. The mouth cover 121 is attached to a chin

portion of the head-and-face cover 104 by a flexible strand 122 of material. The mouth cover 121 includes either a hook portion or a loop portion of a hook-and-loop fastener. The mouth cover 121 mates with either a hook portion or a loop portion (whichever is opposite from the mouth cover 121) of a hook-and-loop fastener defined on a rim of the mouth opening 119.

[0031] The mouth cover 121 is loosely suspended from the flexible strand 122 when the mouth cover 121 is not engaged with the mouth opening rim 124. The mouth cover 121 protects the mouth, lips and throat of a person from drying out when engaging in vigorous activity such as skiing, which creates a strong wind relative to a skier. The mouth cover 121 is removable so that the wearer may move the mouth cover 121 away from the mouth opening rim 124 after the vigorous activity to enhance respiration or to facilitate drinking of fluids.

[0032] The head-and-face cover 104 also has an extension 126 that covers the back of the neck of the wearer. When the hood 115 is in the up position, the extension 126 provides a second layer of material on the back of the neck to keep warm the neck area of the wearer.

[0033] FIGS. 5-9 show an embodiment of a garment 200 with a body portion 202 and a head-and-face cover 204. In the position shown in FIG. 5, the head-and-face cover 204 would be positioned over the head and face of a person (not shown). The garment 200 has a collar 206 that, when the garment is worn by a person, surrounds a neck and throat of the person.

[0034] The head-and-face cover 204 has an eye opening 208 that permits the person wearing the head-and-face cover 204 to see. The eye opening 208 is surrounded by a

border 210 . The garment 200 also has sleeves 212 to keep warm the arms of the person wearing the garment 200. A pocket 214, or other storage structure, is positioned behind the neck of the person wearing the garment 200 when the head-and-face cover 204 is covering the head and face of the person. The pocket 214 is a piece of material attached to the garment body portion 202 along sides and a bottom of the pocket 214. The pocket 214 has an open top to receive the head-and-face cover 204. The head-and-face cover 204 is attached to the garment body portion 202 inside the pocket 214.

[0035] Although the garment 200 is shown without a hood, such as hood 115 in FIG. 1, it is understood that a hood can be attached to the garment 200 below the pocket 214, so that the hood would be external to the head-and-face cover 204 when the hood and the head-and-face cover 204 is placed over the head.

[0036] FIGS. 6-9 illustrate the method used to put the head-and-face cover 204 into the pocket 214 after removing the head-and-face cover 204 from the head of the wearer. As shown in FIG. 6, the head-and-face cover 204 has already been removed from the head of the wearer. The garment body portion 202 has a back portion 216 and a front portion 218. The pocket 214 shown in FIG. 6 is attached to the back portion 216 of the body portion 202, near the collar 206. However, the pocket 214 may also be positioned on the front portion 218, with the head-and-face cover 204 attached to the front portion 218, without changing the operation of putting the head-and-face cover 204 in the pocket 214. The head-and-face cover 204 is attached to the garment back portion 216 by stitching or another type of sewing attachment.

[0037] In FIG. 6, the head-and-face cover 204 has been partially rolled for storage in the pocket 214. FIG. 7 shows the head-and-face cover 204 further rolled into a compact

mass for storage in the pocket 214. FIG. 8 shows that the head-and-face cover 204 has been completely rolled up for insertion into the pocket 214. In FIG. 9, the head-and-face cover 204 has been completely inserted into the pocket 214.

[0038] FIG. 10 shows a hook-and-loop fastener 220 for a pocket 214 to further secure the head-and-face cover 204 (omitted from FIG. 10 for clarity) inside the pocket 214. The hook-and-loop fastener 220 has a loop portion 222 and a hook portion 224 that cooperate with the sides of the pocket 214 to substantially enclose the head-and-face cover 204 when the head-and-face cover 204 has been stored away in the pocket 214. Although FIG. 10 shows a hook-and-loop fastener 220, it is contemplated that other closure devices such as a zipper, a button, a snap, a hasp, or several other types of closure devices can also be used to further secure the head-and-face cover 204 in the pocket 214. It is also contemplated that the fastener 220 may be optional if the pocket 214 is sized to properly receive a particular head-and-face cover.

[0039] Although for the embodiments shown and described above, the pocket is shown to be attached on sides and a bottom of the pocket to either the hood or the garment body portion, it is also contemplated that the pocket may equivalently be a length of material attached to the garment that has one part of a fastener at a first end of the length, and a second part of the fastener at a second end of the length. The head-and-face cover is secured by simply securing the first part of the fastener to the second part of the fastener.

[0040] Turning now to FIGS. 11-15, a garment 300 is shown to have a body portion 302 and a head-and-face cover 304. In the position shown in FIG. 10, the head-and-face cover 304 is positioned over the head and face of a person (not shown). The garment 300

has a collar 306 that, when the garment 300 is worn by a person, surrounds the neck and throat of the person.

[0041] The head-and-face cover 304 has an eye opening 308 that permits the person wearing the head-and-face cover 304 to see. The eye opening 308 is surrounded by a border 310 that reinforces the edges of the head-and face cover 304 around the eye opening 308. The garment 300 also has sleeves 312 to keep warm the arms of the person wearing the garment 300. A pouch 314, or other storage structure, is positioned behind the neck of the person wearing the garment 300 when the head-and-face cover 304 are covering the head and face of the person. When the head-and-face cover 304 is covering the head and face of the person, the head-and-face cover 304 is in a deployed position.

[0042] FIGS. 11-14 illustrate the method used to put the head-and-face cover 304 into the pouch 314 after removing the head-and-face cover 304 from the head of the wearer. As shown in FIG. 11, the head-and-face cover 304 has already been removed from the head of the wearer. The garment body portion 302 has a back portion 316 and a front portion 318. The pouch 314 is attached to a connecting piece 320 which is in turn attached to the body portion 302 near the collar 306.

[0043] The connecting piece 320 shown in FIGS 11-14 may be constructed of a flexible, low stiffness material such as a nylon cloth, cotton, polyester, or another suitable cloth or synthetic material. The connecting piece 320 may also be constructed of a rigid material. The connecting piece 320 is attached to the back portion 318 by stitching, by a hook-and-loop fastener, by a zipper, or by other suitable means. The pouch 314 is attached to a front, lower portion 322 of a back of head-and-face cover 304.

[0044] As shown in FIG. 12, the head-and-face cover 304 has been partially rolled for storage in the pouch 314. FIG. 13 shows the head-and-face cover 304 further rolled into a compact mass for storage in the pouch 314. FIG. 14 shows that the head-and-face cover 304 has been pushed and compacted into the pouch 314 causing the pouch 314 to be inverted and to be suspended from the body portion 302 near the collar 306.

[0045] The pouch 314 is a fragment of resiliently expandable material, such as natural or synthetic rubber, sewn to the head-and-face cover 304 along a periphery 324 of the fragment of material. The pouch is invertible so that when the head-and-face cover 304 is rolled and pushed against a middle portion 326 of the fragment of material, the fragment of material turns inside out to form the pouch 314 and enclose the head-and-face cover 304.

[0046] Although the pouch 314 is shown as being attached to a garment back portion 316, the pouch 314 could also be positioned on the garment front portion 318 without changing the operation of deploying or storing the head-and-face cover 304 in the pouch 314. Although the garment 300 is shown without a hood, such as hood 115 in FIG. 1, it is understood that a hood can be attached to the garment 300 below the pocket 314, so that the hood would be external to the head-and-face cover 304 when the hood and the head-and-face cover 304 is placed over the head.

[0047] For all embodiments, the garment, the head-and-face cover, the pouch, and the hood may be constructed of any suitable, expandable, natural or synthetic material, such as cotton, polyester, or a polymeric material. It is generally preferable, that the storage structure, such as the pouch and the pocket, are constructed of a waterproof or water impermeable material to keep the head-and-face cover dry when the head-and-face cover

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is in the storage structure. Similarly, for certain uses of the garment, such as during snow skiing, it may be desirable that the garment and hood are waterproof or water impermeable to keep the garment itself from soaking up moisture from snow and to thereby keep dry the wearer of the garment.

[0048] As with conventional ski masks, it is generally desirable that the head-and-face cover be constructed from an expandable material so that the head-and-face cover may be stretched for the wearer to deploy the head-and-face cover over the head and face. The head-and-face cover material should also be sufficiently resilient so that it pressingly engages the face of the wearer for dozens of cycles of putting on and taking off the head-and-face cover. Suitable fabrics for the head-and-face cover include knit and woven materials made of natural or synthetic material, such as cotton and polyester, or blends of natural and synthetic material.

[0049] For some embodiments, the garment, hood, and head-and-face cover may be camouflage colors to allow the wearer to blend with the environment. For other embodiments, the garment, hood, and head-and-face cover may be a bright color such as orange to prevent accidental shootings by others, such as hunters.

[0050] Although the storage structures have been labeled a pouch and a pocket for the embodiments described above, the storage structures can be equivalently described as a storage compartment, a bag, a container, an enclosure or other similar structures.

[0051] The term “head-and-face cover” has been used in describing the various embodiments above. However, one may equivalently use the terms ski mask, knit mask, mask or other suitable terms.

[0057] As used herein the term “rollable” as applied to the head-and-face cover means that the head-and-face cover may be rolled into a compact mass by rolling the head-and-face cover in a direction substantially parallel to a spine of the wearer.

[0058] It is to be understood that even though numerous characteristics and advantages of various embodiments of the present invention have been set forth in the foregoing description, together with details of the structure and function of various embodiments of the invention, this detailed description is illustrative only, and changes may be made in detail, especially in matters of structure and arrangements of parts within the principles of the present invention to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.